

JAN 31 2007

FAX TRANSMISSION**DATE:****PTO IDENTIFIER:** Application Number 10/585,703

Patent Number

Inventor: Stefan Bitterlich et al.**MESSAGE TO:** US Patent and Trademark Office**FAX NUMBER:** (571) 273-8300**FROM:** CONNOLLY BOVE LODGE & HUTZ LLP

Ashley I. Pezzner

PHONE: (302) 658-9141**Attorney Dkt. #:** 13156-00063-US**PAGES (Including Cover Sheet):** 9**CONTENTS:**

Certificate of Transmission (1 page)

Transmittal of the Translation of the International Preliminary Report on Patentability (2 pages)

Copy of the Translation of the International Preliminary Report on Patentability (5 pages)

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JAN 31 2007

Docket No.: 13156-00063-US
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Stefan Bitterlich et al.

Application No.: 10/585703

Confirmation No.: N/A

Filed: July 11, 2006

Art Unit: N/A

For: COMPOSITE MEMBRANE

Examiner: Not Yet Assigned

Transmittal of the Translation of the
International Preliminary Report on Patentability

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

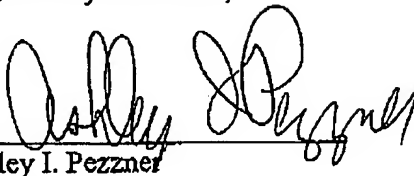
Applicant submits herewith the Translation of the International Preliminary Report on Patentability issued in the corresponding International Application. The International Examiner has deemed claims 1-11 to have novelty, inventive step and industrial applicability. Each reference cited in the International Report on Patentability has been cited by the applicant in an Information Disclosure Statement filed in the above captioned application. Applicant has not received a notification of Missing Requirements.

Applicant believes no fee is due with this submission. However, if a fee is due, please charge our Deposit Account No. 03-2775, under Order No. 13156-00063-US from which the undersigned is authorized to draw.

Application No. National Phase of PCT/EP2005/000047
First Preliminary Amendment

Docket No.: 13156-00063-US

Respectfully submitted,

By 
Ashley I. Pezzner

Registration No.: 35,646
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From the INTERNATIONAL BUREAU

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NOTIFICATION OF TRANSMITTAL
OF COPIES OF TRANSLATION
OF THE INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY
(CHAPTER I OR CHAPTER II
OF THE PATENT COOPERATION TREATY)
(PCT Rules 44bis.3(e) and 72.2)

To:

ISENBRUCK, Günter
ISENBRUCK BÖSL HÖRSCHLER WICHMANN HUHN
Theodor-Heuss-Anlage 12
68165 Mannheim
ALLEMAGNE

Date of mailing (day/month/year) 28 December 2006 (28.12.2006)	Isenbruck Bösl Hörschler Wichmann Huhn, Patentanwälte Theodor-Heuss-Anlage 12 D-68165 Mannheim	B1	
Applicant's or agent's file reference B03/0633PC	04. Jan. 2007	B2	
International application No. PCT/EP2005/000047	First: Vorfrist:	B3	
Applicant BASF AKTIENGESELLSCHAFT et al	International filing date (day/month/year) 05 January 2005 (05.01.2005)	Sekr	
		EDV	
		Abig	

1. Transmittal of the translation to the applicant.

- ☐ The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter I).
- ☒ The International Bureau transmits herewith a copy of the English translation of the international preliminary report on patentability (Chapter II).

2. Transmittal of the copy of the translation to the designated or elected Offices.

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following designated or elected Offices requiring such translation:

KR

The following designated or elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

AE, AG, AL, AM, AP, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EA, EC, EE, EG, EP, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OA, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary report on patentability (Chapter II).

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned within the applicable time limit (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.

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1211 Geneva 20, Switzerland

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TRANSLATION

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference B03/0633PC		FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. PCT/EP2005/000047	International filing date (day/month/year) 05.01.2005	Priority date (day/month/year) 13.01.2004	
International Patent Classification (IPC) or national classification and IPC B01 D71/02, B01 J20/18, B01 D53/22			
Applicant BASF AKTIENGESELLSCHAFT			
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of <u>4</u> sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> (sent to the applicant and to the International Bureau) a total of <u>3</u> sheets, as follows:</p> <p><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 507 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p> <p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the report</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>			
Date of submission of the demand		Date of completion of this report	
Name and mailing address of the IPEA/EP		Authorized officer	
Facsimile No.		Telephone No.	

Form PCT/IPEA/409 (cover sheet) (January 2004)

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2005/000047

Box No. 1

Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language _____ which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report):
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1-15 as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☒ the claims:
- nos. _____ as originally filed/furnished
- nos* _____ as amended (together with any statement) under Article 19
- nos* 1-11 received by this Authority on 03.01.2006 with letter of 03.01.2006
- nos* _____ received by this Authority on _____
- ☐ the drawings:
- sheets _____ as originally filed/furnished
- sheets* _____ received by this Authority on _____
- sheets* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages _____
- ☐ the claims, nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (specify): _____
- ☐ any table(s) related to sequence listing (specify): _____
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages _____
- ☐ the claims, nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (specify): _____
- ☐ any table(s) related to sequence listing (specify): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

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INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2005/000047

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1.	Statement		
	Novelty (N)	Claims 1-11	YES
		Claims	NO
	Inventive step (IS)	Claims 1-11	YES
		Claims	NO
	Industrial applicability (IA)	Claims 1-11	YES
		Claims	NO
2.	Citations and explanations (Rule 70.7)		
	This report makes reference to the following document:		
	D1: GB-A-2 340 112 (EXXON CHEMICAL PATENTS INC.), 16 February 2000		
1.	Claims 1-11 meet the requirements of PCT Article 33(1) because their subject matter is novel, involves an inventive step and is industrially applicable.		
1.1	The reasons therefor are as follows:		
	According to claim 1 of the present application, the present composite membrane comprises		
	(A) an asymmetrically constructed substrate and		
	(B) "a porous separation layer consisting of an MFI-type zeolite" (highlighting in bold by the examiner).		
	In contrast, D1 discloses a composite membrane which, besides a substrate, comprises a two-ply separation layer (see also point 2.2 in the		

Form PCT/PEA/409 (Box No. V) (January 2004)

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2005/000047

Box No. V

Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

written opinion of 21 October 2005).

D1 does not suggest modifying the structure of the separation layer as defined in the present claim 1. This is made clear, in particular, by the fact that the membranes described in D1 and the membranes according to the invention are used in entirely different processes (D1: isomerisation of xylene mixtures; present application: separation of olefins). The present application and D1 solve different technical problems.

Apart from that, the simplified structure of the present membrane is already sufficient to substantiate an inventive step.

- 1.2 Documents WO 94/25151 and WO 9401209 (cited on page 2 of the description) thus represent the closest prior art. The two-part form of claim 1 corresponds to the teaching in those documents.

PTO/SB/97 (09-06)
Approved for use through 03/31/2007. OMB 0651-0031
U. S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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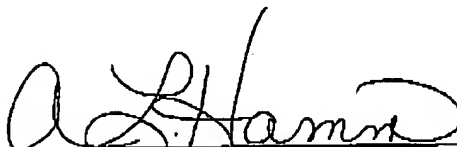
Application No. (if known): 10/585,703

Attorney Docket No.: 13156-00063-US

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on January 31, 2007
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Signature

Amy L. Hamm

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35,646

Registration Number, if applicable

(302) 658-9141

Telephone Number

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